

### Features

- ◆ Low profile package
- ◆ Ideal for automated placement
- ◆ Glass passivated chip junction
- ◆ High forward surge capability
- ◆ Super fast reverse recovery time



### Mechanical Data

**Case:** SMC Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**High temperature soldering guaranteed:** 260°C/10 seconds

**Polarity:** Cathode line denotes the cathode end

**Mounting Position:** Any

### Maximum Ratings & Electrical Characteristics

Ratings at TA = 25°C unless otherwise specified

Characteristic	Symbol	MU48CB	Units
Peak repetitive reverse voltage	VRRM	600	V
RMS reverse voltage	VRMS	420	V
DC blocking voltage	VDC	600	V
Maximum average forward output current	IF(AV)	4	A
Peak forward surge current, 8.3ms single half-sine-wave, @TJ = 25°C	IFSM	90	A
Rating for fusig (t<8.3ms)	I2t	26.65	A2sec
Maximum instantaneous forward voltage @ 4A	VF	1.25	V
Maximum reverse recovery time (Note 1)	Trr	50	nS
Maximum Reverse current Rated VR	IR	@TA =25°C	5
		@TA =125°C	150

### Thermal Characteristics

Characteristic	Symbol	MU48CB	Units
Typical thermal resistance (Note 2)	R ΘJA	27	°C /W
	R ΘJL	4	
Operating junction temperature range	TJ	- 55 ---- + 175	°C
Storage temperature range	TSTG	- 55 ---- + 150	°C

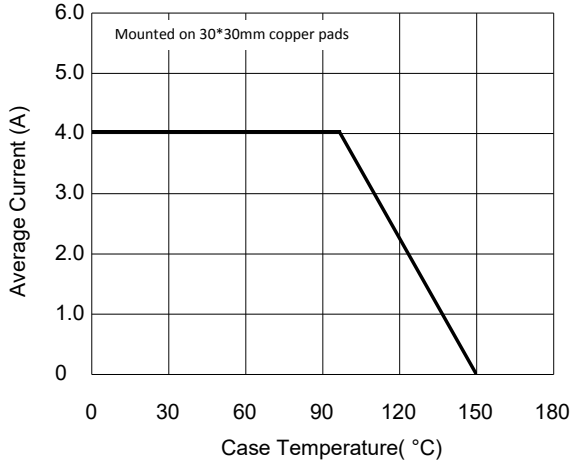
Note:

(1) IF=0.5A, IR=1A, IRR=0.25A

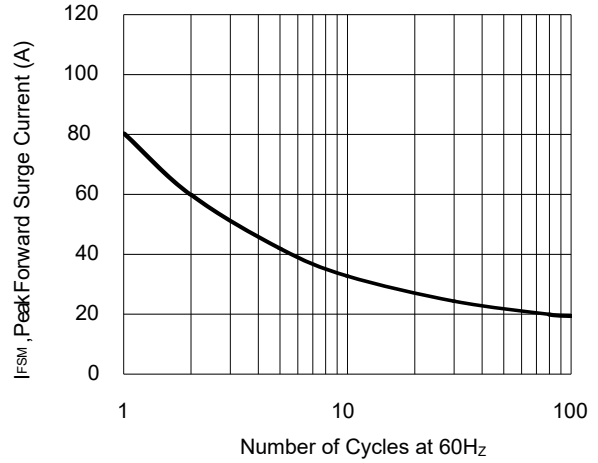
(2) Units mounted on P.C.B. with 30 x30 mm land areas.

### Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

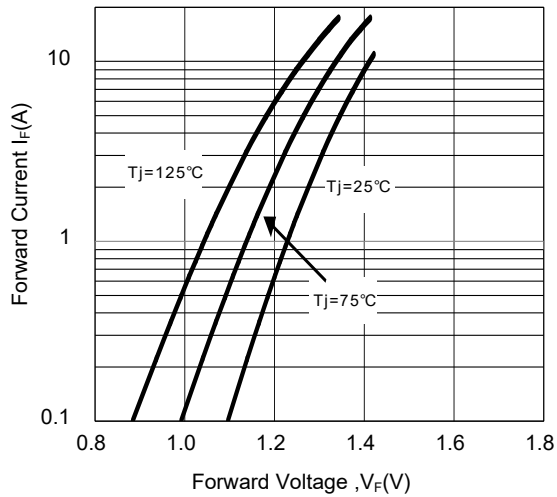
**Fig.1-Forward Current Derating Curve**



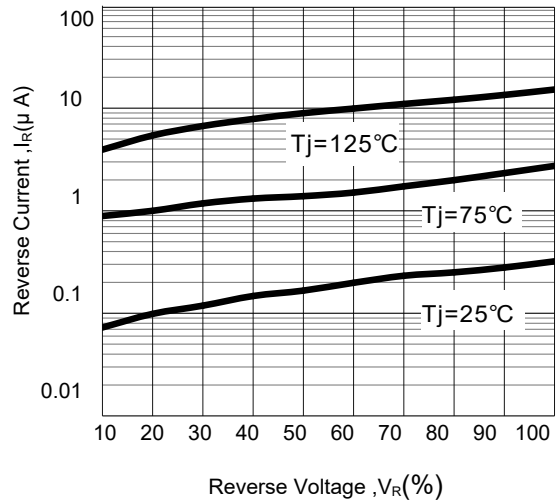
**Fig.2- Surge Current Derating Curve**



**Fig.3- Typical Forward Voltage Characteristic**

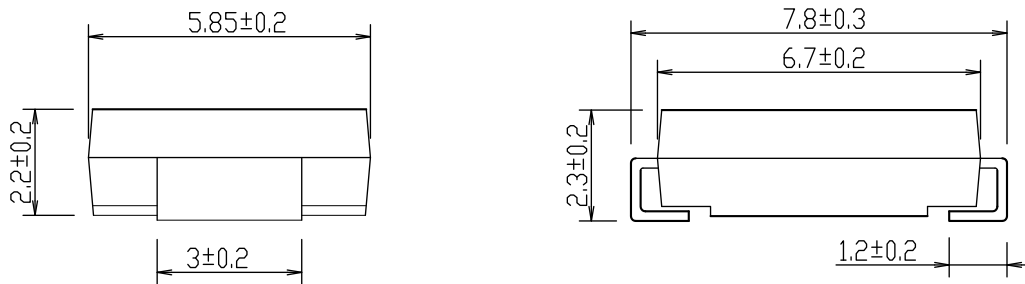


**Fig.4- Typical Reverse Characteristic**

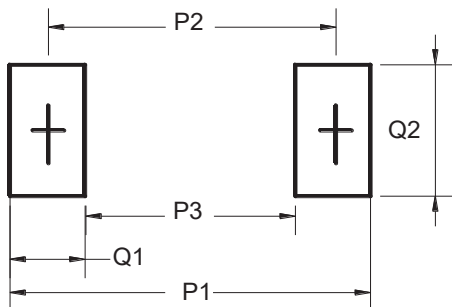


### Package Outline Dimensions(unit:mm)

#### DO-214AB (SMC)



### Mounting Pad Layout(unit:mm)



Dim	Millimeters
P1	9.80
P2	6.80
P3	3.80
Q1	3.00
Q2	4.00

### Ordering Information

Part No.	Marking	Package	Shipping
MU48CB	MU48CB	SMC	3000PCS /Tape&Reel

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